rity. Now I understand it all, and send you this notice to communicate to the Zoological Society at their next Meeting.

"The *Trochilus angelæ*, in full dress, as described by Lesson in the 'Illustrations de Zoologie,' pt. 5, has this full dress only during the months from October to January, which are the summer months here. In the beginning of February, or in some cases already at the end of January, the large blue-coloured feathers of the side of the neck fall out, and also the ruby-red feathers of the gorget, and white feathers with a black spot in the middle come out in their place. When this change is finished the bird becomes 'la cola de tixera' of Azara. I send you an individual which is in the middle of the change, killed in the middle of February. The female is in all seasons whitish green on the underside, with a shorter tail, and with white spots on the tips of the three external tail-feathers. These spots are generally lost by wearing off, and were therefore seen by Azara only on one feather. The young male before the first change of the plumage has the colour and dress of the female, differing only in having yellow points on the feathers, which points are lost in the somewhat older individuals. In the same manner the colour of the underside is not whitish green, but yellow green. I send you a young male beginning to show the plumage of the full dress of the summer in some spots on the throat-feathers.

"In my notes in the 'Anales,' before referred to, I have made an error in determining the '*Mas bello*' of Azara as *Trochilus bicolor*. It is a different species, which Heine has named in Cabanis's Journal *Chlorostilbon phaëthon*—the *Trochilus phaëthon* of Gould (see Journal f. Orn. 1863, p. 197)."

A paper was read by Professor Allman, F.R.S., on the characters and affinities of *Potamogale*, a genus of insectivorous mammals recently discovered in Western Africa. Professor Allman came to the conclusion that this singular form was more closely allied to *Solenodon* than to any other known genus, but that it presented such striking peculiarities as would render it necessary to regard it as the type of a new family of Insectivora, to which the name of *Potamogalidæ* might be given.

This paper will be published with illustrations in the Society's 'Transactions.'

The following papers were read :—

1. Report on a Collection of Animals from Madagascar, transmitted to the Society by Mr. J. Caldwell. By P. L. Sclater, M.A., Ph.D., F.R.S., Secretary to the Society.

(Plate XXVII.)

Mr. J. Caldwell, of Port Louis, Mauritius, has recently transmitted to me a small collection of animals in spirits, collected in Madagascar, in the vicinity of Antananarivo, which was alluded to in his letter

read before this Society on the 27th of January, 1863*. The species represented in the series are two Mammals, five Reptiles, and a Crayfish.

The Mammals, which have been kindly determined for me by my friend Dr. W. Peters, are of the following species:—

1. Nyctinomus (Mormopterus†) jugularis, Peters, n. sp.

N. *supra fuscus, pilis basi albis, subtus fusco-canus, alis nigris; capite depresso, rostro lato; auriculis triangularibus, sejunctis; fovea jugulari magna.*

The only specimen of this very interesting species is a male, distinguished from all other species by a deep transverse fossa immediately before the manubrium sterni.

The head appears more flattened than in any other species, and terminates with a broad flattened snout. The triangular large ears are, compared with those of other species, rather thin, not united, but separated by an interspace of 4 millim.

The fur is soft, of moderate length. The hair of the upper parts is dark brown, at the base white; that of the underside greyish. The skull is more flattened than in other species, and remarkable for a strongly developed ante-orbital crista.

	millim.
Total length	0·089
Length of the head	0·021
——— of the ear in front	0·014
Breadth of the ear	0·012
Length of humerus	0·024
——— of forearm	0·037
——— of thumb	0·0085
——— of second finger	0·0335
——— of third finger	0·067
——— of fourth finger	0·0565
——— of fifth finger	0·035
——— of thigh	0·013
——— of tibia	0·0105
——— of foot with claws	0·008
——— of tail	0·019
——— of free end of the tail	0·011

2. Mus, sp.?

A very young, indeterminable specimen, with only two molars de-

* See P. Z. S. 1863, p. 48.

† *Mormopterus*, nov. subg. In the formula of the teeth $\left(\frac{3.1}{3.2}\,\frac{1}{1}\,\frac{1-1}{4}\,\frac{1}{1}\,\frac{1.3}{2.3}\right.$, when younger $\left.\frac{3.1}{3.2}\,\frac{1}{1}\,\frac{1-1}{6}\,\frac{1}{1}\,\frac{1.3}{2.3}\right)$ it differs from *Nyctinomus* with $\frac{5}{5}$ molars, and approaches more to *Molossus*. The lips also are not so much plicated as in *Nyctinomus*. It is a species intermediate between *Nyctinomus* and *Molossus*, thus showing another instance of the relationship of the fauna of Madagascar to the American fauna.

veloped. Above brown, penicillated with black, with the bases of the hairs blackish grey; below white. In its colour and the length of the ear, this species is allied to the South-African Fieldmice, as *Mus colonus*, *M. natalensis*, &c.

The Reptiles, which Dr. Günther has named for me, consist of two Snakes (*Dipsas colubrina* and *Herpetodryas bernieri*), a Chameleon (*Chamæleon lateralis*, Gray), several fine specimens of a Lizard of the genus *Gerrhosaurus* (*G. lineatus*, Cocteau = *Cicigna ornata*, Gray), and an example of another Lizard (*Liolepisma belli*, Gray). All these are species already known to the fauna of Madagascar.

The Crayfish I have submitted to Mr. Spence Bate, as our leading authority on this branch of natural history. Mr. Spence Bate pronounces it to be a new species of *Astacus*, which he proposes to call after its discoverer, with the following characters:—

Astacus caldwelli, Spence Bate, sp. nov. (Pl. XXVII.)

The eyes are planted on short peduncles. The first pair of antennæ have the third joint of the peduncle reaching to the extremity of the rostrum. Both branches of the flagellum are slender; and the primary branch, which is half as long again as the secondary, is about half the length of the anterior division of the cephalon. The second pair of antennæ are about three times the length of the first; and the flagellum is minutely articulate, each articulus being, in length, less than half its breadth, and at the basal extremity being about half the breadth of the last joint of the peduncle. The squamigerous process of the third joint is rounded and thickened upon the outside, straight, thin, and ciliated upon the inner, and obtuse at the apex. The rostrum reaches to the extremity of the penultimate joint of the peduncle of the external antennæ, rounded at the extremity, dorsally concave, the margins fringed within and above the actual edge with a rim of short, blunt denticles. The ocular orbit is deeply excavate, and armed posteriorly near the centre by a small denticle, and at the infero-lateral extremity by a short, sharp, curved, and anteriorly directed strong tooth. The lateral walls of the cephalon are thickly covered with numerous, subequally distant, short, spinous protuberances, which gradually lessen in importance towards the dorsal surface of the carapace, which is perfectly smooth, except for the well-defined fissure that distinguishes the anterior portion of the carapace from the posterior—the demarcation between the antennal and mandibular somites. The first or large chelate pair of pereiopoda are subequal in size, but differ in form from those of every other species of the genus with which I am acquainted, and resemble more in general aspect those of the genus *Homarus*. The dactylos is curved inwards, and tipped with a sharp unguis; the dactyloid process of the propodos is similarly formed, and meets the dactylos only at or near the apex; the approximating edges, however, are armed with a few small and one large tubercle opposite to

corresponding ones. The inferior and external margin of the propodos, from the extremity of the dactyloid process to the carpal articulation, is convex, and longer than that of the intero-superior margin of the propodos and dactylos together. The carpus is armed with three blunt and one sharp anteriorly directed teeth upon the inner edge, and two sharp strong teeth upon the under surface. The meros is furnished with two rows of teeth, that converge together towards the ischium upon the inner surface. The other pereiopoda have little to attract attention. The second somite of the pleon has a tuberculous ridge just above the lateral margin. The inner scale of the posterior pair of pleopoda is furnished with a central row of short, sharp teeth; and the telson is armed with similar teeth, of which there are a few in the median line and others in two lateral obsolete rows.

The specimen from which the description is taken is a male. Of all the species of this genus, this form approximates the nearest to its marine allies, in the appearance of the great chelate pereiopoda, of any that we are acquainted with. The generally close resemblance of the several species of this genus is certainly very remarkable, when we take into consideration the vast geographical distribution that it has—larger, perhaps, than that of any genus of Crustacea that is not of marine habits. Species have been taken in the frozen waters of North American rivers, in the hot latitudes of Chili, in temperate Europe and Tasmania, and now from the African island of Madagascar. We do not know of any having yet been recorded from the inland rivers of that continent.

DESCRIPTION OF PLATE XXVII.

Fig. 1. *Astacus caldwelli.*
2. Carapace, seen laterally.
3. Second pair of antennæ.
4. Squamigerous process of the same.

2. Note on Pseudorca meridionalis.

By W. H. Flower, F.R.S., etc.

In the last volume of the Society's 'Proceedings' (1864, p. 420) I described two Cetacean skulls from Tasmania, presented to the Museum of the Royal College of Surgeons by Mr. W. L. Crowther, under the name of *Orca meridionalis*. Having obtained some further information regarding this species, I wish to add a few notes to my previous paper.

As before mentioned, I had requested Mr. Crowther to obtain, if possible, a complete skeleton of the so-called "Blackfish," to which these skulls were said to belong. That gentleman, with a most praiseworthy desire to advance our knowledge of the Cetaceous animals of the part of the world in which he resides, set to work with great energy to collect specimens; and among a most valuable